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		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L79	L75 and streptococcus	9
☐	L78	L75 and (rumen)adj(bacteria)	0
☐	L77	L76 and rumen	0
☐	L76	L75 and bacteria	51
☐	L75	(stimulate)adj(adhesion)	127
☐	L74	(stimulate)adj(adhesion)adj(antigen)	0
☐	L73	L72 and (thioglycollate)	3
☐	L72	(lactobacillus)adj(spp)	459
☐	L71	L65 and (adherence)adj(antigen?)	1
☐	L70	L65 and (stimulate)same(adherence)adj(antigens)	0
☐	L69	L65 and (stimulate)same(adherence)adj(antigen)	0
☐	L68	L67 and thioglycollate	1
☐	L67	L65 and (brain)adj(heart)adj(infusion)	27
☐	L66	L65 and (standard)adj(medium)	1
☐	L65	(s)adj(bovis)	285
		DB=USPT; PLUR=YES; OP=OR	
☐	L64	4748018.pn.	1
☐	L63	5080895.pn.	1
☐	L62	6287555.pn.	1
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☐	L61	L57 and (brain)adj(heart)adj(infusion)	8
		DB=EPAB; PLUR=YES; OP=OR	
☐	L60	DE-69930288-T2.did.	0
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☐	L59	200030661	2
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR	
☐	L58	L57 and (adhesion)	3
☐	L57	(streptococcus)adj(bovis)same(culture)	48
☐	L56	L55 and IgY	11
☐	L55	(530/389.5).ccls.	240
☐	L54	L52 and (lactic)adj(acid)same(bacteria)	4

☐	L53	L52 and (lactic)adj(acid)adj(inducing)adj(bacteria)	0
☐	L52	L51 and IgY	690
☐	L51	(435/69.1).ccls.	26661
☐	L50	L49 and IgY	4
☐	L49	(424/169.1).ccls.	61
☐	L48	L46 and (s)adj(bovis)	0
☐	L47	L46 and (lactic)adj(acid)adj(producing)adj(bacteria)	0
☐	L46	L45 and IgY	19
☐	L45	(424/164.1).ccls.	298
☐	L44	L41 and (s)adj(bovis)	1
☐	L43	L41 and (lactic)adj(acid)adj(producing)adj(bacteria)	0
☐	L42	L41 and (lactic)adj(acid)adj(producing)adj(immunogen)	1
☐	L41	L40 and IgY	50
☐	L40	(424/130.1).ccls.	2082
☐	L39	(acidosis)same(streptococcus)adj(bovis)	15
☐	L38	(acidosis)same(strep)adj(bovis)	0
☐	L37	(IgY)same(strep)adj(bovis)	0
☐	L36	(IgY)same(anti-adherence)	0
☐	L35	(IgY)same(dietary)adj(supplement)	0
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☐	L34	4550019.pn.	1
☐	L33	3947836.pn.	1
☐	L32	3794732.pn.	1
☐	L31	5919451.pn.	1
☐	L30	5753268.pn.	1
☐	L29	5585098.pn.	1
☐	L28	5367054.pn.	1
☐	L27	5196193.pn.	1
☐	L26	4748018.pn.	1
☐	L25	4550019.pn.	1
☐	L24	5080895.pn.	1
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
☐	L23	L22 and IgY	4
☐	L22	(streptococcus)adj(bovis)	648
☐	L21	(streptocossu)adj(bovis)	0
☐	L20	L19 and bovis	10
☐	L19	L18 and streptococcus	116
☐	L18	L16 and antibod?	717

☐	L17	L16 and IgY	18
☐	L16	(feed)adj(additive)	8937
☐	L15	(feed)adj(additive)same(IgY)	1
☐	L14	(feed)adj(additive)same(IgY)same(acidosis)	0
☐	L13	L12 and IgY	1
☐	L12	(lactic)adj(acid)same(streptococcus)same(acidosis)	16
☐	L11	L10 and IgY	5
☐	L10	(lactic)adj(acid)same(microorganism)	3282
☐	L9	(mitteness)adj(bradley)adj(M)	2
☐	L8	(nash)adj(peter)	21
☐	L7	(adherence)adj(inhibitor)same(IgY)	1
☐	L6	L5 and (SB)adj(antigen)	1
☐	L5	L4 and bovis	57
☐	L4	L3 and (Streptococcus)	789
☐	L3	(IgY)	4810
☐	L2	(IgY)same(streptococcus)adj(bovis)	0
	DB=USPT; PLUR=YES; OP=OR		
☐	L1	5585098.pn.	1

END OF SEARCH HISTORY

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NEWS 12	JAN 22	CA/CAplus updated with revised CAS roles
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NEWS 19	FEB 26	MEDLINE reloaded with enhancements
NEWS 20	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 21	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 22	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 23	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 24	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 25	MAR 16	CASREACT coverage extended
NEWS 26	MAR 20	MARPAT now updated daily
NEWS 27	MAR 22	LWPI reloaded

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=> s acidosis bacteria
L1            1 ACIDOSIS BACTERIA

=> d l1 cbib abs

L1   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
1979:101428   Document No. 90:101428  Relationship of rumen gram-negative
     bacteria and free endotoxin to lactic acidosis in cattle.  Nagaraja, T.
     G.; Bartley, E. E.; Fina, L. R.; Anthony, H. D. (Dep. Anim. Sci. Ind.,
     Kansas State Univ., Manhattan, KS, USA).  Journal of Animal Science
     (Savoy, IL, United States), 47(6), 1329-37 (English) 1978.  CODEN: JANSAG.
     ISSN: 0021-8812.
AB   Feeding grain to animals not adapted to grain resulted in a marked
     increase in the concentration of free endotoxin in the rumen.  Endotoxin
concentration
     increased 15-18-fold within 12 h after lactic acidosis was induced through
     grain engorgement.  The increase was accompanied by a shift from
     predominantly gram-neg. to gram-pos. bacteria.  Data from in vitro fermns.
     showed that the increase in free endotoxin concentration was not accompanied
by a
     decrease in the number of gram-neg. bacteria.  The absorption of endotoxin
     from the rumen was not apparent by the actinomycin D assay procedure
     because no difference was observed in mice lethality of plasma from control
     and post-engorgement samples.  However, the granulocytosis that
     accompanied acidosis was suggestive of systemic action of rumen bacterial
     endotoxin.


=> s streptococcus bovis
L2         4259 STREPTOCOCCUS BOVIS

=> s l2 and tryptase soy broth
L3            0 L2 AND TRYPTASE SOY BROTH

=> s l2 and growth medium
L4           43 L2 AND GROWTH MEDIUM

=> s l4 and adherins
L5            0 L4 AND ADHERINS
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=> s l4 and adhesion molecule
L6 0 L4 AND ADHESION MOLECULE

=> s l4 and tryptase soy broth
L7 0 L4 AND TRYPTASE SOY BROTH

=> dup remove l4
PROCESSING COMPLETED FOR L4
L8 18 DUP REMOVE L4 (25 DUPLICATES REMOVED)

=> d l8 1-18 cbib abs

L8 ANSWER 1 OF 18 MEDLINE on STN DUPLICATE 1
2006546004. PubMed ID: 16971591. In vitro bacterial growth and in vivo ruminal microbiota populations associated with bloat in steers grazing wheat forage. Min B R; Pinchak W E; Anderson R C; Hume M E. (Texas Agricultural Experiment Station, P.O. Box 1658, Vernon, Texas 76385, USA.) Journal of animal science, (2006 Oct) Vol. 84, No. 10, pp. 2873-82. Journal code: 8003002. E-ISSN: 1525-3163. Pub. country: United States. Language: English.
AB The role of ruminal bacteria in the frothy bloat complex common to cattle grazing winter wheat has not been previously determined. Two experiments, one in vitro and another in vivo, were designed to elucidate the effects of fresh wheat forage on bacterial growth, biofilm complexes, rumen fermentation end products, rumen bacterial diversity, and bloat potential. In Exp. 1, 6 strains of ruminal bacteria (Streptococcus bovis strain 26, Prevotella ruminicola strain 23, Eubacterium ruminantium B1C23, Ruminococcus albus SY3, Fibrobacter succinogenes ssp. S85, and Ruminococcus flavefaciens C94) were used in vitro to determine the effect of soluble plant protein from winter wheat forage on specific bacterial growth rate, biofilm complexes, VFA, and ruminal H2 and CH4 in mono or coculture with Methanobrevibacter smithii. The specific growth rate in plant protein medium containing soluble plant protein (3.27% nitrogen) was measured during a 24-h incubation at 39 degrees C in Hungate tubes under a CO2 gas phase. A monoculture of M. smithii was grown similarly, except under H2:CO2 (1:1), in a basal methanogen growth medium supplemented likewise with soluble plant protein. In Exp. 2, 6 ruminally cannulated steers grazing wheat forage were used to evaluate the influence of bloat on the production of biofilm complexes, ruminal microbial biodiversity patterns, and ruminal fluid protein fractions. In Exp. 1, cultures of R. albus ($P < 0.01$) and R. flavefaciens ($P < 0.05$) produced the most H2 among strains and resulted in greater ($P < 0.01$) CH4 production when cocultured with M. smithii than other coculture combinations. Cultures of S. bovis and E. ruminantium + M. smithii produced the most biofilm mass among strains. In Exp. 2, when diets changed from bermudagrass hay to wheat forage, biofilm production increased ($P < 0.01$). Biofilm production, concentrations of whole ruminal content ($P < 0.01$), and cheesecloth filtrate protein fractions ($P < 0.05$) in the ruminal fluid were greater on d 50 for bloated than for nonbloated steers when grazing wheat forage. The molecular analysis of the 16S rDNA showed that 2 different ruminal microbiota populations developed between bloated and nonbloated animals grazing wheat forage. Bloat in cattle grazing wheat pastures may be caused by increased production of biofilm, resulting from a diet-influenced switch in the rumen bacterial population.

L8 ANSWER 2 OF 18 MEDLINE on STN DUPLICATE 2
2003159175. PubMed ID: 12676687. Identification of equine cecal bacteria producing amines in an in vitro model of carbohydrate overload. Bailey S R; Baillon M-L; Rycroft A N; Harris P A; Elliott J. (Department of Veterinary Basic Sciences, Royal Veterinary College, London, United Kingdom.. jelliott@rvc.ac.uk) . Applied and environmental microbiology, (2003 Apr) Vol. 69, No. 4, pp. 2087-93. Journal code: 7605801. ISSN: 0099-2240. Pub. country: United States. Language: English.
AB Acute laminitis has been associated with the overgrowth of gram-positive

bacteria within the equine hindgut, causing the release of factor(s) leading to ischemia-reperfusion of the digits. The products of fermentation which trigger acute laminitis are, as yet, unknown; however, vasoactive amines are possible candidates. The objectives of this study were to use an in vitro model of carbohydrate overload to study the change in populations of cecal streptococci and lactobacilli and to establish whether certain species of these bacteria were capable of producing vasoactive amines from amino acids. Cecal contents from 10 horses were divided into aliquots and incubated anaerobically with either corn starch or inulin (fructan; both at 1 g/100 ml). Samples were taken at 6-h intervals over a 24-h period for enumeration of streptococci, lactobacilli, and gram-negative anaerobes by a dilution method onto standard selective growth media. The effects of the antibiotic virginiamycin (1 mg/100 ml) and calcium hydrogen phosphate (CaHPO(4); 0.3 g/100 ml) were also examined. Fermentation of excess carbohydrate was associated with increases in numbers of streptococci and lactobacilli (2- to 3.5-log unit increases; inhibited by virginiamycin) but numbers of gram-negative anaerobes were not significantly affected. A screening agar technique followed by 16S rRNA gene sequence analysis enabled the identification of 26 different bacterial strains capable of producing one or more vasoactive amines. These included members of the species Streptococcus bovis and five different Lactobacillus spp. These data suggest that certain bacteria, whose overgrowth is associated with carbohydrate fermentation, are capable of producing vasoactive amines which may play a role in the pathogenesis of acute laminitis.

L8 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN

2002:841804 Document No. 138:234693 Bacteriology of the Labrador dog gut: a cultural and genotypic approach. Greetham, H. L.; Giffard, C.; Hutson, R. A.; Collins, M. D.; Gibson, G. R. (Food Microbial Sciences Unit, School of Food Biosciences, The University of Reading, Reading, UK). Journal of Applied Microbiology, 93(4), 640-646 (English) 2002. CODEN: JAMIFK. ISSN: 1364-5072. Publisher: Blackwell Science Ltd..

AB To carry out an extensive study of the microflora composition of the Labrador dog gut. Faecal specimens from four Labradors were collected and plated onto growth media designed to recover total anaerobes, bacteroides, bifidobacteria, lactobacilli, clostridia, Gram-pos. cocci, total aerobes and coliforms. Morphol. different isolates were collected from all agars inoculated with faeces from one canine individual (repeated four times). A total of 157 out of 171 isolates were identified using 16S rRNA gene sequencing. Sequence anal. showed that agar selectivity was poor, especially when bacteroides and Gram-pos. cocci were the targets. Bifidobacteria were not detected in any of the samples analyzed, indicating their presence at low or negligible levels. The gene sequences of many of the isolates (n = 45, representing 29% of the total) did not correlate with known species in the Ribosomal Database Project and EMBL databases, suggesting the presence of novel gut diversity. Traditional culture methods fail to reflect the bacterial diversity present in Labrador dog faeces. This study has shown the value of mol.-based methodologies for determining bacterial profiles in the Labrador dog gut microbiota, but has also exposed the limitations of purportedly selective agars.

L8 ANSWER 4 OF 18 SCISEARCH COPYRIGHT (c) 2007 The Thomson Corporation on STN

2002:328874 The Genuine Article (R) Number: 538AT. Influence of ammonia concentration on N-15-ammonia incorporation and de novo amino acid synthesis by the non-cellulolytic ruminal bacteria, Prevotella bryantii B(1)4, Selenomonas ruminantium HD4 and Streptococcus bovis ES1. Atasoglu C (Reprint); Wallace R J. Canakkale Onsekiz Mart Univ, Fac Agr, Dept Anim Sci, TR-17100 Canakkale, Turkey (Reprint); Rowett Res Inst, Aberdeen AB21 9SB, Scotland. TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES (2002) Vol. 26, No. 2, pp. 389-395. ISSN: 1300-0128. Publisher: SCIENTIFIC TECHNICAL RESEARCH COUNCIL TURKEY, PO BOX

605 YENISEHIR, 06445 ANKARA, TURKEY. Language: English.
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The influence of ammonia concentration on N-15-ammonia incorporation and de novo synthesis of amino acids by three predominant non-cellulolytic species of ruminal bacteria, Prevotella bryantii B(1)4, Selenomonas ruminantium HD4 and Streptococcus bovis ES1, was investigated. The medium contained pancreatic casein hydrolysate (comprising mainly peptides with some amino acids) at a concentration of 1 g/litre and additions of graded concentrations of (NH4Cl)-N-15. When the initial concentration of ammonia increased from 0.045 to 0.436 g N/L in the growth medium, the proportion of cellular nitrogen and amino acid nitrogen derived from ammonia by P. bryantii and S. ruminantium increased (ranging from 0.33 to 0.84 for cellular-nitrogen and from 0.23 to 0.67 for amino acid-nitrogen) ($P<0.001$). but S. bovis incorporated a fixed proportion of ammonia and peptides in all media except for the lowest ammonia containing medium ($P>0.05$). Glutamate and aspartate were the most highly labelled amino acids with N-15, whereas N-15 enrichment in proline was lower than that in other amino acids in all species, followed by phenylalanine in P. bryantii, lysine in S. ruminantium and phenylalanine, valine and lysine in S. bovis. indicating preferential incorporation of these amino acids from pancreatic casein hydrolysate. The results of the present study, thus, suggest that the concentration of ammonia has an important effect on de novo synthesis of bacterial cellular-nitrogen and amino acids in the non-cellulolytic ruminal bacteria and this effect depends on bacterial species.

L8 ANSWER 5 OF 18 SCISEARCH COPYRIGHT (c) 2007 The Thomson Corporation on STN DUPLICATE 3

2002:470552 The Genuine Article (R) Number: 556TV. Characterization of superoxide dismutase in the rumen bacterium Streptococcus bovis. Holovska K; Lenartova V (Reprint); Holovska K; Javorsky P. Univ Vet Med, Komenskeho 73, Kosice 04181, Slovakia (Reprint); Univ Vet Med, Kosice 04181, Slovakia; Slovak Acad Sci, Inst Anim Physiol, Kosice, Slovakia. VETERINARNI MEDICINA (FEB-MAR 2002) Vol. 47, No. 2-3, pp. 38-44. ISSN: 0375-8427. Publisher: INST AGRICULTURAL FOOD INFORMATION, SLEZSKA 7, PRAGUE 120 56, CZECH REPUBLIC. Language: English.
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Superoxide dismutase (SOD) isoenzymes of the rumen bacterium Streptococcus bovis 4/1 were studied. Native PAGE showed a single band of Mn-SOD, unaffected by 10 mM cyanide or 5 mM hydrogen peroxide under both aerobic and anaerobic growth conditions. When the metals were removed from the growth medium by Chelex 100, the addition of manganese increased enzymatic activity, while addition of iron inhibited SOD activity. Changes in Mn-SOD and glutathione peroxidase (GSHPx) activities evoked by paraquat and increased values of TBARS indicated that these enzymes were not able to sufficiently prevent oxidative stress at given paraquat concentrations.

L8 ANSWER 6 OF 18 MEDLINE on STN DUPLICATE 4

2000005612. PubMed ID: 10537220. Physiological characterization of Streptococcus bovis mutants that can resist 2-deoxyglucose-induced lysis. Bond D R; Tsai B M; Russell J B. (Section of Microbiology, Cornell University and Agricultural Research Service, US Department of Agriculture, Ithaca, NY 14853, USA.) Microbiology (Reading, England), (1999 Oct) Vol. 145 (Pt 10), pp. 2977-85. Journal code: 9430468. ISSN: 1350-0872. Pub. country: ENGLAND: United Kingdom. Language: English.

AB Streptococcus bovis JB1 does not normally lyse, but stationary phase lysis can be induced by including 2-deoxyglucose (2DG) in the growth medium. Isolates deficient in glucose/2DG phosphotransferase activity (PTS-) also lysed when 2DG was present (Lys+) and this result indicated that 2DG phosphorylation via the PTS was not an obligate requirement for 2DG-induced lysis. Cells and cell walls from 2DG-grown cultures lysed faster when proteinase K was added, but glucose-grown cultures and cell walls were not affected. A lipoteichoic

acid (LTA) extract (aqueous phase from hot phenol treatment) from glucose-grown cells inhibited the lysis of 2DG-grown cultures, but a similar extract prepared from 2DG-grown cells was without effect. Thin-layer chromatography and differential staining indicated that wild-type and Lys+ PTS- cells incorporated 2DG into LTA, but lysis-resistant cultures (Lys- PTS+ and Lys- PTS-) did not. LTA from lysis-resistant (Lys- PTS+ and Lys- PTS-) cells grown with glucose and 2DG also prevented 2DG-dependent lysis of the wild-type. LTA could not inhibit degradation of cell walls isolated from 2DG-grown cultures, but LTA inhibited the lysis of Micrococcus lysodeikticus (Micrococcus luteus) cells that were exposed to supernatants from 2DG-grown S. bovis cultures. Group D streptococci (including S. bovis) normally have an alpha-1,2 linked glucose disaccharide (kojibiose) in their LTA, but kojibiose cannot be synthesized from 2DG. This observation suggested that the kojibiose moiety of LTA was involved in autolysin inactivation. Wild-type S. bovis had ATP- as well as PEP-dependent mechanisms of 2DG phosphorylation and one lysis-resistant phenotype (Lys- PTS-) had reduced levels of both activities. However, the Lys- PTS+ phenotype was still able to phosphorylate 2DG via ATP and PEP and this result indicated that some other step of 2DG incorporation into LTA was being inhibited. Based on these results, growth in the presence of 2DG appears to prevent synthesis of normal LTA, which is involved in the regulation of autolytic enzymes.

L8 ANSWER 7 OF 18 SCISEARCH COPYRIGHT (c) 2007 The Thomson Corporation on STN

1999:343318 The Genuine Article (R) Number: 192TJ. Alternative schemes of butyrate production in Butyrivibrio fibrisolvens and their relationship to acetate utilization, lactate production, and phylogeny. Diez-Gonzalez F; Bond D R; Jennings E; Russell J B (Reprint). Cornell Univ, Wing Hall, Ithaca, NY 14853 USA (Reprint); Cornell Univ, Ithaca, NY 14853 USA; ARS, USDA, Ithaca, NY 14853 USA. ARCHIVES OF MICROBIOLOGY (APR 1999) Vol. 171, No. 5, pp. 324-330. ISSN: 0302-8933. Publisher: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA. Language: English.

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Butyrivibrio fibrisolvens strains D1 and A38 produced little lactate, but strain 49 converted as much as 75% of its glucose to lactate. Strain 49 had tenfold more lactate dehydrogenase activity than strains D1 or A38, this activity was stimulated by fructose 1,6-bisphosphate, and had a pH optimum of 6.25. A role for fructose 1,6-bisphosphate or pH regulation of lactate production in strain 39 was, however, contradicted by the observations that very low concentrations (< 0.2 mM) of fructose 1,6-bisphosphate gave maximal activity, and continuous cultures did not produce additional lactate when the pH was decreased. The lactate production of strain 49 was clearly inhibited by the presence of acetate in the growth medium. When strain 49 was supplemented with as little as 5 mM acetate, lactate production decreased dramatically, and most of the glucose was converted to butyrate. Strain 49 did not possess butyrate kinase activity, but it had a butyryl-CoA/acetate CoA transferase that converted butyryl-CoA directly to butyrate, using acetate as an acceptor. The transferase had a low affinity for acetate (K-m of 5 mM), and this characteristic explained the acetate stimulation of growth and butyrate formation. Strains D1 and A38 had butyrate kinase but not butyryl-CoA/acetate CoA transferase, and it appealed that this difference could explain the lack of acetate stimulation and lactate production. Based on these results, it is unlikely that B. fibrisolvens would ever contribute significantly to the pool of ruminal lactate. Since relatives of strain 49 (strains Nor37, PI-7, VV1, and OB156, based on 16S rRNA sequence analysis) all had the same method of butyrate production, it appeared that butyryl-CoA/acetate CoA transferase might be a phylogenetic characteristic. We obtained a culture of strain B835 (NCDO 2398) that produced large amounts of lactate and had butyryl-CoA/acetate CoA transferase activity, but this strain had previously been grouped with strains A38 and DI based on 16S rRNA sequence analysis. Our strain B835 had a 16S rRNA sequence unique from the one currently deposited in GenBank, and had high sequence similarity with strains 39 and Nor37 rather

than with strains A38 or D1.

L8 ANSWER 8 OF 18 MEDLINE on STN DUPLICATE 5
95373990. PubMed ID: 7646013. Cellodextrin efflux by the cellulolytic ruminal bacterium Fibrobacter succinogenes and its potential role in the growth of nonadherent bacteria. Wells J E; Russell J B; Shi Y; Weimer P J. (Section of Microbiology, Cornell University, Ithaca, New York 14853, USA.) Applied and environmental microbiology, (1995 May) Vol. 61, No. 5, pp. 1757-62. Journal code: 7605801. ISSN: 0099-2240. Pub. country: United States. Language: English.

AB When glucose or cellobiose was provided as an energy source for Fibrobacter succinogenes, there was a transient accumulation (as much as 0.4 mM hexose equivalent) of cellobiose or cellotriose, respectively, in the growth medium. Nongrowing cell suspensions converted cellobiose to cellotriose and longer-chain cellodextrins, and in this case the total cellodextrin concentration was as much as 20 mM (hexose equivalent). Because cell extracts of glucose- or cellobiose-grown cells cleaved cellobioise and cellotriose by phosphate-dependent reactions and glucose 1-phosphate was an end product, it appeared that cellodextrins were being produced by a reversible phosphorylase reaction. This conclusion was supported by the observation that the ratio of cellodextrins to cellodextrins with one greater hexose [n/(n + 1)] was approximately 4, a value similar to the equilibrium constant (Keq) of cellobiose phosphorylase (J. K. Alexander, J. Bacteriol. 81:903-910, 1961). When F. succinogenes was grown in a cellobiose-limited chemostat, cellobiose and cellotriose could both be detected, and the ratio of cellotriose to cellobiose was approximately 1 to 4. On the basis of these results, cellodextrin production is an equilibrium (mass action) function and not just an artifact of energy-rich cultural conditions. Cellodextrins could not be detected in low-dilution-rate, cellulose-limited continuous cultures, but these cultures had a large number of nonadherent cells. Because the nonadherent cells had a large reserve of polysaccharide and were observed at all stages of cell division, it appeared that they were utilizing cellodextrins as an energy source for growth.(ABSTRACT TRUNCATED AT 250 WORDS)

L8 ANSWER 9 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
1995:444011 Document No.: PREV199598458311. A defined medium for rumen bacteria and identification of strains impaired in de novo biosynthesis of certain amino acids. Nili, N.; Brooker, J. D. [Reprint author]. Dep. Anim. Sci., Waite Agric. Res. Inst., Univ. Adelaide, Glen Osmond, SA 5064, Australia. Letters in Applied Microbiology, (1995) Vol. 21, No. 2, pp. 69-74.
CODEN: LAMIE7. ISSN: 0266-8254. Language: English.

AB A completely defined growth medium has been developed to determine the nitrogen requirements for several species of ruminal bacteria, and has revealed two strains which are impaired in de novo biosynthesis of certain amino acids. Using NH-4Cl as a sole nitrogen source, the medium supported growth of Butyrivibrio, Selenomonas, Prevotella and Streptococcus species. One strain of B. fibrisolvens (E14) and one strain of P. ruminicola (GA33) did not grow in the presence of NH-4Cl until the medium was supplemented with amino acids or peptides. For B. fibrisolvens strain E 14, methionine was identified as the specific growth-limiting amino acid although methionine alone did not support growth in the absence of NH-4Cl. For P. ruminicola strain GA33, any individual amino acid other than methionine or cysteine could supplement the medium and support growth. Enzyme assays confirmed a lack of NADH and NADPH-dependent glutamate dehydrogenase (GDH) activities in this strain.

L8 ANSWER 10 OF 18 MEDLINE on STN DUPLICATE 6
94304158. PubMed ID: 8031077. Influence of Yucca shidigera extract on ruminal ammonia concentrations and ruminal microorganisms. Wallace R J; Arthaud L; Newbold C J. (Rowett Research Institute, Bucksburn, Aberdeen, United Kingdom.) Applied and environmental microbiology, (1994 Jun) Vol.

60, No. 6, pp. 1762-7. Journal code: 7605801. ISSN: 0099-2240. Pub. country: United States. Language: English.

AB An extract of the desert plant Yucca shidigera was assessed for its possible benefit in ruminal fermentation. The extract bound ammonia in aqueous solution when concentrations of ammonia were low (up to 0.4 mM) and when the extract was added at a high concentration to the sample (20%, vol/vol). The apparent ammonia-binding capability was retained after autoclaving and was decreased slightly following dialysis. Acid-precipitated extract was inactive. No evidence of substantial ammonia binding was found at higher ammonia concentrations (up to 30 mM). When Y. shidigera extract (1%, vol/vol) was added to strained rumen fluid in vitro, a small (6%) but significant ($P < 0.05$) decrease in ammonia concentration occurred, apparently because of decreased proteolysis. Inclusion of Y. shidigera extract (1%, vol/vol) in the growth medium of the rumen bacterium Streptococcus bovis ES1 extended its lag phase, while growth of Butyrivibrio fibrisolvens SH13 was abolished. The growth of Prevotella (Bacteroides) ruminicola B(1)4 was stimulated, and that of Selenomonas ruminantium Z108 was unaffected. Protozoal activity, as measured by the breakdown of 14C-leucine-labelled S. ruminantium in rumen fluid incubated in vitro, was abolished by the addition of 1% extract. The antimicrobial activities were unaffected by precipitating tannins with polyvinylpyrrolidone, but a butanol extract, containing the saponin fraction, retained its antibacterial and antiprotozoal effects. Saponins from other sources were less effective against protozoa than Y. shidigera saponins. Y. shidigera extract, therefore, appears unlikely to influence ammonia concentration in the rumen directly, but its saponins have antimicrobial properties, particularly in suppressing ciliate protozoa, which may prove beneficial to ruminal fermentation and may lead indirectly to lower ruminal ammonia concentrations.

L8 ANSWER 11 OF 18 MEDLINE on STN DUPLICATE 7

94143602. PubMed ID: 8310179. Acetohydroxy acid synthase and threonine deaminase activities, and the biosynthesis of isoleucine-leucine-valine in Streptococcus bovis. Basso A L; Ricca E; Caruso C; Ferrara L; De Felice M. (Istituto Adattamento Bovini e Bufali Ambiente Mezzogiorno, C.N.R., Naples, Italy.) Research in microbiology, (1993 Sep) Vol. 144, No. 7, pp. 539-45. Journal code: 8907468. ISSN: 0923-2508. Pub. country: France. Language: English.

AB Acetohydroxy acid synthase (AHAS) and threonine deaminase (TD) activities were found in Streptococcus bovis and shown to be involved in the biosynthesis of the branched chain amino acids isoleucine, leucine and valine. Apparent lack of repression of AHAS synthesis by the end-products and reduced sensitivity of S. bovis growth to analogues of the branched chain amino acids suggested that secretion of isoleucine, leucine and valine in the growth medium may be a consequence of the regulatory features of AHAS. A glycyl-leucine-resistant mutant with reduced TD activity secreted a reduced amount of isoleucine and an increased amount of valine, which might be a result of the reduced rate of synthesis of the isoleucine precursor alpha-ketobutyrate and of a consequent preferential carbon flow through the valine branch of the pathway.

L8 ANSWER 12 OF 18 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN DUPLICATE 8

1984:277613 Document No.: PREV198478014093; BA78:14093. INFLUENCE OF CULTURE REDOX POTENTIAL ON THE GROWTH AND METABOLISM OF THE RUMEN BACTERIA SELENOMONAS-RUMINANTIUM BACTEROIDES-AMYLOPHILUS BACTEROIDES-SUCCINOGENES AND STREPTOCOCCUS-BOVIS IN BATCH CULTURE. MAROUNEK M [Reprint author]; WALLACE R J. INST ANIM PHYSIOL AND GENETICS, UHRINEVES, PRAGUE, CZECH CS 251-61. Journal of General Microbiology, (1984) Vol. 130, No. 2, pp. 223-230.
CODEN: JGMIAN. ISSN: 0022-1287. Language: ENGLISH.

AB One facultatively and 3 strictly anaerobic rumen bacteria were grown in pH-controlled anaerobic batch cultures in which the Eh (redox potential)

of the medium was regulated by the addition of titanium (III) citrate solution at values < -50 mV and potassium ferricyanide > -50 mV. Growth occurred over a wide range of Eh, with the maximum limit being +360, +250, +175 and +414 mV for S. ruminantium, B. amylophilus, B. succinogenes and the aerotolerant S. bovis, respectively. Changes in Eh had little influence on the growth yield or ratios of fermentation end-products in these bacteria over a wide range, although the specific growth rate of all species tended to decline at Eh values > 0 mV. Abnormal, elongated forms of S. ruminantium and B. succinogenes predominated at high Eh. Evidently O2, and not a high Eh, is the toxic factor in oxidized anaerobic growth medium and it would not be necessary to regulate Eh when the growth and metabolism of these bacteria is under study, provided that O2-free conditions are maintained.

L8 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
1985:130611 Document No. 102:130611 Study of the ability of strains of several species of lactic acid bacteria to accumulate free amino acids. Ioanisyan, T. A.; Sarkisyan, V. K.; Kharatyan, V. G. (USSR). Trudy Erevanskogo Zooveterinarnogo Instituta, 56, 30-3 (Russian) 1984. CODEN: TEZVAJ. ISSN: 0371-6562.
AB Lactobacillus And Streptococcus strains were able to accumulate in a growth medium 15.05 and 1.75 mg% free amino acids, resp. With L. casei, accumulation of free amino acids was 17.63 mg%. High levels of proline [147-85-3] (31.25% of total free amino acids) were found in the medium with S. bovis. Intrastrain differences in free amino acid formation were higher than intraspecies differences (standard deviation values reached 300-400%). Thus, the individual properties of strains should be considered in selecting lactic acid bacteria for use as bacterial starter for cheese manufacture

L8 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
1981:28871 Document No. 94:28871 Pigment production in chemostat cultures of Streptococcus bovis. II. Effect of carbon dioxide and pH on pigment and glucose end-products. Schein, Catherine H.; Fiechter, Armin (Swiss Fed. Inst. Technol., ETH Hoenggerberg, Zurich, CH-8093, Switz.). European Journal of Applied Microbiology and Biotechnology, 10(4), 341-8 (English) 1980. CODEN: EJABDD. ISSN: 0171-1741.
AB Seven of 8 type strains of S. bovis, including all 6 rumen isolates tested, produced pigment on agar media if the anaerobic atmospheric was supplemented with CO2. Tween 80 or NaHCO3 added to the growth medium could not substitute for gaseous CO2. When one of the best pigment-forming strains, S. bovis 2B, was grown in a glucose-limited chemostat at constant dilution rate (D), decreasing the concentration of the gas overlay resulted in pigment washout and increased lactate and cell mass. Changing pH at a constant D altered the pigment production and glucose end products of the culture.

L8 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
1978:437535 Document No. 89:37535 The effect of pH and potassium phosphate buffer on the toxicity of cadmium for bacteria. Korkeala, H.; Pekkanen, T. J. (Dep. Food Hyg., Coll. Vet. Med., Helsinki, Finland). Acta Veterinaria Scandinavica, 19(1), 93-101 (English) 1978. CODEN: AVSCA7. ISSN: 0044-605X.
AB An increase in the pH of plate count agar led to increased toxicity of Cd for Micrococcus luteus, Staphylococcus aureus, Clostridium perfringens, Escherichia coli, and Pseudomonas aeruginosa. The effect of the pH on toxicity was not clearly observed with Streptococcus bovis and was absent with Bacillus subtilis. When K phosphate buffer was added to the growth medium, the Cd toxicity for M. luteus and B. subtilis was enhanced. The toxicity of Cd for S. bovis decreased when K phosphate buffer was added to the medium. When the pH increased at differing phosphate concns., the sensitivity of M. luteus to Cd decreased. The effect of pH on Cd toxicity for bacteria is apparently due to a continuously increasing neg. charge towards an alkaline value by most bacteria

which increases the affinity of cations towards the cell wall.

L8 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
1973:69104 Document No. 78:69104 Pectinolytic activity of rumen streptococci. Ziolecki, Aleksander; Tomerska, Hanna; Wojciechowicz, Maria (Inst. Anim. Physiol. Nutr., Pol. Acad. Sci., Jablonna/Warsaw, Pol.). Acta Microbiologica Polonica, Series A: Microbiologia Generalis, 4(4), 183-8 (English) 1972. CODEN: AMIGB9. ISSN: 0567-7815.
AB Fourteen strains of sheep rumen streptococci were isolated and identified as Streptococcus bovis. Pectinolytic activity did not depend on the presence of pectin (I) in the growth medium, but was increased by it. I was degraded to unsatd. lower oligogalacturonides which were not further utilized by the organisms. None of the strains utilized galacturonic acid. The streptococci utilized only the sugars accompanying I and released during its degradation

L8 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
1972:445435 Document No. 77:45435 Buffer capacity of nutrient media in relation to that of rumen fluid. Stewart, C. S. (Dep. Microbiol., Rowett Res. Inst., Aberdeen, UK). Biochemical Journal, 127(3), 68P (English) 1972. CODEN: BIJOAK. ISSN: 0264-6021.
AB An increased growth rate and .apprx.30% gain in dry weight of the rumen bacteria Streptococcus bovis, Lactobacillus species 17, and Bacteroides ruminicola were obtained when grown in nutrient media buffered with phosphate or HCO3- to the same extent as rumen fluid.

L8 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
1964:470848 Document No. 61:70848 Original Reference No. 61:12356c-e Amino group formation and glutamate synthesis in Streptococcus boris. Burchall, J. J.; Niederman, R. A.; Wolin, M. J. (Univ. of Illinois, Urbana). Journal of Bacteriology, 88(4), 1038-44 (Unavailable) 1964. CODEN: JOBAAY. ISSN: 0021-9193.
AB Exts. of S. bovis grown on NH4+ as a N source contain a nicotinamide adenine dinucleotide phosphate (NADP)-linked glutamic dehydrogenase and are devoid of alanine dehydrogenase, other amino acid dehydrogenases, and aspartase. A potential source of reduced NADP for glutamate synthesis is a NADP and NAD-linked glyceraldehyde-3-phosphate dehydrogenase present in the exts. Expts. with 14C-labeled glucose and NaHCO3 indicate that the glutamate C skeleton is synthesized by a tricarboxylic acid pathway. The synthesis of the C skeleton of glutamate is repressed when glutamate or casein hydrolyzate supplement the NH4+-containing growth medium. Repression of glutamic dehydrogenase and a NAD-linked isocitric dehydrogenase occurs only when complex N sources, but not when free amino acids, are added to the growth medium.

=> s lactobacillus spp
L9 2589 LACTOBACILLUS SPP

=> s l9 and adherins
L10 0 L9 AND ADHERINS

=> s l9 and adhesion
L11 70 L9 AND ADHESION

=> s l11 and growth medium
L12 0 L11 AND GROWTH MEDIUM

=> s l11 and antibod?
L13 14 L11 AND ANTIBOD?

=> dup remove l13
PROCESSING COMPLETED FOR L13
L14 4 DUP REMOVE L13 (10 DUPLICATES REMOVED)

=> d l14 1-4 cbib abs

L14 ANSWER 1 OF 4 MEDLINE on STN DUPLICATE 1
2002651095. PubMed ID: 12381460. Adjuvant properties and colonization potential of adhering and non-adhering Lactobacillus spp following oral administration to mice. Plant Laura J; Conway Patricia L. (School of Microbiology and Immunology, The University of New South Wales, UNSW SYDNEY, 2052, Sydney, NSW, Australia.) FEMS immunology and medical microbiology, (2002 Oct 11) Vol. 34, No. 2, pp. 105-11. Journal code: 9315554. ISSN: 0928-8244. Pub. country: Netherlands. Language: English.
AB This study aimed to determine whether adhesive strains of Lactobacillus possessed an increased ability to colonize the gastrointestinal tract and to examine the adjuvant capacities of these strains for the 50000 molecular-mass fragment C of tetanus toxin (TTFC) following oral administration. The three strains used in this study showed different patterns of adhesion to tissue from all regions of the gastrointestinal tract, with two strains adhering in high numbers and one strain showing negligible association with all tissue types. The colonization patterns in the gastrointestinal tract of C57BL/6 mice following oro-gastric dosing was also monitored, and it was found that adhesive Lactobacillus strains could be detected for at least 24 h, in association with either fecal material and/or with gastrointestinal tissue or contents. In addition, mice were given an oro-gastric dose of the lactobacilli (5 x 10(8) colony forming units) with TTFC (10 and 50 micro g), and the serum-specific IgM and IgG antibody responses monitored in serum. The adhesive strains, which persisted within the gastrointestinal tract for at least 24 h, showed enhanced antigen-specific serum IgG and IgM antibody responses in comparison to a non-adhesive strain that failed to be detected in the gastrointestinal tract. Adhesion to the gastrointestinal tract is a factor affecting the capacity of lactobacilli to persist within the gastrointestinal tract and to act as an adjuvant for orally administered antigen.

L14 ANSWER 2 OF 4 MEDLINE on STN DUPLICATE 2
2000401518. PubMed ID: 10856380. Adherence of Lactobacillus to intestinal 407 cells in culture correlates with fibronectin binding. Kapczynski D R; Meinersmann R J; Lee M D. (Southeast Poultry Research, USDA/ARS, Athens, GA, USA.) Current microbiology, (2000 Aug) Vol. 41, No. 2, pp. 136-41. Journal code: 7808448. ISSN: 0343-8651. Pub. country: United States. Language: English.
AB Lactobacilli are members of the normal mucosal microflora of most animals. Many isolates of Lactobacillus spp. are adherent to epithelial cells. In this study, using Lactobacillus acidophilus and L. agilis, we detected adherence in a pattern that suggested that the bacteria were binding to extracellular matrix proteins. Fluorescent microscopy, by using anti-fibronectin antibody, demonstrated that the isolates localize in those areas where fibronectin was detected. In addition, fibronectin pretreatment of the bacterial cells decreased adherence to Intestinal 407 epithelial cell monolayers. Cellular binding to fibronectin was detected by enzyme-linked immunosorbent assay and affinity binding to radio-labeled fibronectin. Fibronectin may be one of the eukaryotic receptors mediating attachment of Lactobacillus to mucosal surfaces.

L14 ANSWER 3 OF 4 MEDLINE on STN
2001416473. PubMed ID: 11464916. Lactic acid bacteria as live vaccines. Mercenier A; Muller-Alouf H; Grangette C. (Department of Microbiology of Ecosystems, Institut Pasteur de Lille, France.) Current issues in molecular biology, (2000 Jan) Vol. 2, No. 1, pp. 17-25. Ref: 49. Journal code: 100931761. ISSN: 1467-3037. Pub. country: England: United Kingdom. Language: English.
AB Mucosal routes for vaccine delivery offer several advantages over systemic inoculation from both immunological and practical points of view. The development of efficient mucosal vaccines therefore represents a top

prority in modern vaccinology. One way to deliver protective antigens at the mucosal surfaces is to use live bacterial vectors. Until recently most of these were derived from attenuated pathogenic microorganisms. As an alternative to this strategy, non-pathogenic food grade bacteria such as lactic acid bacteria (LAB) are being tested for their efficacy as live antigen carriers. The LABVAC european research network is presently comparing the vaccine potential of Lactococcus lactis, Streptococcus gordonii and Lactobacillus spp. To date, it has been shown that systemic and mucosal antigen-specific immune responses can be elicited in mice through the nasal route using the three LAB systems under study. Data on successful oral and vaginal immunisations are also accumulating for L. lactis and S. gordonii, respectively. Moreover, the immune responses can be potentiated by co-expression of interleukins. Future areas of research include improvement of local immunisation efficiency, analysis of in vivo antigen production, unravelling of the Lactobacillus colonisation mechanisms and construction of biologically contained strains.

L14 ANSWER 4 OF 4 MEDLINE on STN DUPLICATE 3

93175875. PubMed ID: 8439162. Inhibition of adhesion of Escherichia coli K88 to piglet ileal mucus by Lactobacillus spp. Blomberg L; Henriksson A; Conway P L. (Department of General and Marine Microbiology, University of Goteborg, Sweden.) Applied and environmental microbiology, (1993 Jan) Vol. 59, No. 1, pp. 34-9. Journal code: 7605801. ISSN: 0099-2240. Pub. country: United States. Language: English.

AB Enteropathogenic Escherichia coli K88 colonizing the piglet ileum adhere to the mucosa by K88 fimbrial appendages. A recent study in our laboratory has implicated indigenous lactobacilli in the suppression of the colonization potential of enteropathogenic E. coli as measured by adhesion to ileal mucus. The aim of this study was to investigate the effect of Lactobacillus spp. of porcine origin on the adhesion of K88 fimbriae of E. coli. With an in vitro assay, the adhesion of E. coli K88ab strain G1108E and E. coli K88ac strain 1107 to 35-day-old piglet ileal mucus was studied in the presence of spent culture fluid of Lactobacillus spp. Detailed studies focused specifically on culture fluid of Lactobacillus fermentum 104R. Subsequently, the ileal mucus was exposed to the retentate of the spent culture fluid after dialysis and fractionation. Adhesion was confirmed to be attributable to K88 fimbriae when K88-specific monoclonal antibodies and isogenic mutants of E. coli K-12 with and without the plasmid containing the K88 gene were used. The active component was characterized by pretreatment of dialysis retentate with heat, periodate, pronase, and centrifugation, as well as by growth of the lactobacillus in various media and by assays at both 0 and 37 degrees C. All three lactobacilli of porcine origin reduced adhesion of E. coli K88 by approximately 50%. Inhibition occurred when mucus was pretreated with either spent culture dialysis retentate or the void volume (fraction of > 250,000 molecular weight) after gel filtration. The activity of the dialysis retentate was sensitive to pronase, but there was still activity at 0 degrees C.(ABSTRACT TRUNCATED AT 250 WORDS)

=> d his

(FILE 'HOME' ENTERED AT 13:01:19 ON 24 MAR 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, SCISEARCH, CAPLUS' ENTERED AT 13:01:34 ON 24 MAR 2007

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L1            1 S ACIDOSIS BACTERIA
L2         4259 S STREPTOCOCCUS BOVIS
L3            0 S L2 AND TRYPTASE SOY BROTH
L4           43 S L2 AND GROWTH MEDIUM
L5            0 S L4 AND ADHERINS
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L6             0 S L4 AND ADHESION MOLECULE
L7             0 S L4 AND TRYPTASE SOY BROTH
L8            18 DUP REMOVE L4 (25 DUPLICATES REMOVED)
L9          2589 S LACTOBACILLUS SPP
L10            0 S L9 AND ADHERINS
L11           70 S L9 AND ADHESION
L12            0 S L11 AND GROWTH MEDIUM
L13           14 S L11 AND ANTIBOD?
L14            4 DUP REMOVE L13 (10 DUPLICATES REMOVED)

=> s l2 and adhesion
L15           32 L2 AND ADHESION

=> s l15 and antibod?
L16            4 L15 AND ANTIBOD?

=> dup remove l16
PROCESSING COMPLETED FOR L16
L17            4 DUP REMOVE L16 (0 DUPLICATES REMOVED)

=> d l17 1-4 cbib abs

L17  ANSWER 1 OF 4  EMBASE  COPYRIGHT (c) 2007 Elsevier B.V. All rights
     reserved on STN
2006463720  EMBASE  Profiling the humoral immune response in colon cancer
     patients: Diagnostic antigens from Streptococcus bovis
     . Tjalsma H.; Scholler-Guinard M.; Lasonder E.; Ruers T.J.; Willems H.L.;
     Swinkels D.W.. H. Tjalsma, Department of Clinical Chemistry/441, Radboud
     University Nijmegen-Medical Centre, P.O. Box 9101, 6500 HB Nijmegen,
     Netherlands. h.tjalsma@akc.umcn.nl. International Journal of Cancer  Vol.
     119, No. 9, pp. 2127-2135  1 Nov 2006.
     Refs: 31.
     ISSN: 0020-7136. E-ISSN: 1097-0215. CODEN: IJCNAW.
     Pub. Country: United States. Language: English. Summary Language: English.
     Entered STN: 20061010. Last Updated on STN: 20061010
AB   The human bowel contains a large and dynamic bacterial population that is
     not only essential for intestinal health, but also critical for the
     development of diseases such as cancer.  In this respect, the
     Gram-positive bacterium Streptococcus bovis has been
     associated with colon cancer for many years.  To investigate the clinical
     importance of this association, an immunocapture mass spectrometry assay
     was developed that can generate infection-related protein profiles.  The
     composition of these profiles is governed by the capture of specific
     antigens by serum antibodies from colon cancer patients.  This
     assay showed that S. bovis antigen profiles could distinguish 11 out of 12
     colon cancer patients from 8 control subjects, whereas antigen profiles
     derived from the gut bacterium Escherichia coli were not diagnostic for
     colon cancer.  Moreover, S. bovis antigen profiles were also detected in
     polyp patients, indicating that infection with this bacterium does occur
     early during carcinogenesis.  Highly accurate tandem mass spectrometry was
     used to identify one of the diagnostic antigens as a surface-exposed
     heparin-binding protein, which might be involved in attachment of S. bovis
     to tumor cells.  Together, these findings corroborate the hypothesis that
     colonic lesions provide a specific niche for S. bovis, resulting in
     tumor-associated "silent" infections.  These infections, however, only
     become apparent in colon cancer patients with a compromised immune system
     (bacteremia) or coincidental cardiac valve lesions (endocarditis).  This
     makes profiling of the humoral immune response against "silent" S. bovis
     infections a promising diagnostic tool for the early detection of human
     colon cancer, which is crucial for the effective treatment of this
     disease. .COPYRGT. 2006 Wiley-Liss, Inc.

L17  ANSWER 2 OF 4  CAPLUS  COPYRIGHT 2007 ACS on STN
2004:333891  Document No. 140:351652  Anal. chip comprising evanescent field
     measurement platform and microarray for detection of 16S-rRNA from clin.
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relevant bacteria in liquid samples. Schrenzel, Jacques; Francois, Patrice; Charbonnier, Yvan; Jacquet, Jean Gabriel; Utinger, Dominic; Kresbach, Gerhard M.; Abel, Andreas; Ehrat, Markus (Hopitaux Universitaires De Geneve, Switz.). PCT Int. Appl. WO 2004033720 A2 20040422, 82 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-EP10626 20030924. PRIORITY: EP 2002-22631 20021009.

AB The invention is related to an anal. chip for the simultaneous determination of one or more different bacteria in a liquid sample comprising - an evanescent field measurement platform, e.g. an optical waveguide, as a solid carrier and a plurality of immobilized specific recognition elements forming an array for the detection of bacterial 16S-rRNA without amplification of the polynucleotide sequences contained in the sample. The invention is also related to an anal. method based on the use of said anal. chip to detect clin. relevant bacteria in biol. samples. Methods for immobilization of recognition elements (such as polynucleotides, peptides, antigens, etc.) on the chip are disclosed. The compns. of the layers of the optical waveguide are also disclosed.

L17 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

2004:182241 Document No. 140:198089 Immunogen adherence inhibitor directed to lactic acid producing organisms and method of making and using it. Nash, Peter; Mitteness, Bradley M. (USA). U.S. Pat. Appl. Publ. US 2004043020 A1 20040304, 16 pp., Cont.-in-part of U.S. Ser. No. 38,260. (English). CODEN: USXXCO. APPLICATION: US 2003-658491 20030908. PRIORITY: US 1999-143985P 19990715; US 2000-201268P 20000502; US 2000-616843 20000714; US 2002-38260 20020107.

AB A microbial adherence inhibitor specific to lactic acid producing microorganisms, in the form of fowl egg antibodies is disclosed, along with the method of making it and methods of using it. The inhibitor functions by substantially preventing the attachment or adherence of colony-forming immunogens in the rumen and intestinal tracts of host food animals. The inhibitor is made by inoculating female birds with the immunogen, allowing time for an immune response in the female bird and then harvesting the eggs that contain antibodies to the immunogen. The egg contents can be dried or used as a liquid and added to the feed or water for the host animals. Dependent upon the particular immunogen with which the female bird is inoculated, the egg antibody is used to promote the growth of food animals by improving feed conversion rates by decreasing the lactic acid production caused by the presence of certain colony-forming organisms in the animals, and to substantially reduce or eliminate the incidence of species that have been linked to very high production of lactic acid which can result in reduced performance and in acute situations, dangerously low rumen pH levels. When high levels of lactic acid are present in the rumen, rumen ulcers can form. When rumen ulcers are present other bacteria such as Fusobacterium necrophorum can escape the rumen and cause liver abscesses or laminitis, which further reduce feed conversion efficiency. Colony forming immunogens such as Streptococcus bovis (a major lactic acid producer) and Fusobacterium necrophorum can both be targeted by antibodies to enhance feed efficiency.

L17 ANSWER 4 OF 4 MEDLINE on STN

93316307. PubMed ID: 8392108. Adherence of glucan-positive and glucan-negative strains of Streptococcus bovis to human epithelial cells. Von Hunolstein C; Ricci M L; Orefici G. (Laboratorio di Batteriologia e Micologia Medica, Istituto Superiore di Sanita, Rome, Italy.) Journal of medical microbiology, (1993 Jul) Vol. 39, No. 1, pp. 53-7. Journal code: 0224131. ISSN: 0022-2615. Pub.

country: ENGLAND: United Kingdom. Language: English.

AB Adherence to buccal epithelial cells (BEC) and the role played in the binding by lipoteichoic acid (LTA) and other superficial components have been studied in reference and clinical strains of Streptococcus bovis either glucan-positive biotype I or glucan-negative biotype II. To avoid the synthesis of glucan by biotype I strains, adherence was studied in bacteria grown in Todd-Hewitt broth, a sucrose deficient medium. Both biotypes were shown to bind to BEC and clinical isolates, irrespective of biotype attached to the same degree but in greater numbers than reference strains. Inhibition studies suggest that at least two mechanisms,--LTA and protein-mediated--are responsible for the adherence of both glucan-positive and negative strains of S. bovis. Moreover, in glucan-positive strains capsular polysaccharides may be also involved.

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=> s IgY
L18       2386 IGY

=> s l18 and streptococcus bovis
L19          0 L18 AND STREPTOCOCCUS BOVIS

=> s l18 and lactobacillus spp
L20          0 L18 AND LACTOBACILLUS SPP

=> s l18 and streptococcus
L21        100 L18 AND STREPTOCOCCUS

=> s l21 and bovis
L22          3 L21 AND BOVIS

=> dup remove l22
PROCESSING COMPLETED FOR L22
L23          3 DUP REMOVE L22 (0 DUPLICATES REMOVED)

=> d l23 1-3 cbib abs
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L23 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

2003:737787 Document No. 139:244716 Multifunctional immune complexes for microbial phagocytosis. Pitkovski, Jacob; Morag, Ely; Pinchasov, Yosef (Yamit Biotechnologies Ltd., Israel). PCT Int. Appl. WO 2003076471 A2 20030918, 91 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-IL196 20030310. PRIORITY: IL 2002-148598 20020310.

AB The authors disclose multi-functional targeting complexes for inducing phagocytosis of pathogenic agents. The complexes of the invention comprises at least one target recognition component comprising a mol. that specifically binds to the desired target agent, an immuno-active component comprising an immuno-stimulatory agent; and optionally, a connecting component that assocs. the targeting component and the immuno-active component. In one example, the targeting component is biotinylated IgY, the immuno-active component is anti-avidin IgG, and the connecting component is avidin-conjugated polystyrene microbeads. The complex of the invention provides an effective therapeutic prevention and treatment of various pathogenic disorders, such as mastitis in cows and furunculosis in fish. The invention further relates to compns. comprising the targeting complex, methods of treatment and uses thereof.

L23 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

2004:963810 Document No. 142:239111 Method for the production of an egg

containing anti-Edwardsiella tarda IgY, anti-Streptococcus iniae IgY and Mycobacterium bovis IgY simultaneously, egg produced thereby, and fish feed containing. Baek, Ban Seok; Han, Chan Gyu; Huh, Gang Jun; Kim, Yeong Bung; Ko, Seong Chan; Lee, Nam Hyeong; Noh, Jeong Hae; Shin, Tae Beom; Son, Dong Hwa; Sung, Gi Seung (Korea Food Development Institute, S. Korea). Repub. Korean Kongkae Taeho Kongbo KR 2003000261 A 20030106, No pp. given (Korean). CODEN: KRXXA7. APPLICATION: KR 2001-35945 20010622.

AB A Method for the production of an egg containing anti-Edwardsiella tarda IgY, anti-Streptococcus iniae IgY and Mycobacterium bovis IgY simultaneously, an egg produced thereby and a fish feed containing specific IgY thereof are provided. The produced egg and fish feed have excellent prevention effect on a flatfish disease. An emulsion containing Edwardsiella tarda IgY , anti-Streptococcus iniae IgY, Mycobacterium bovis IgY and aluminum oxide in ratio of 3.0:3.0:1.0:3.0 is inoculated into a chicken in the amount of 1.0 mL one time, and then, from a 2nd time, the above emulsion and an adjuvant (ISA25) are inoculated together there into in the amount of 1.0 mL at intervals of 2 wk to produce an egg containing specific IgY. Egg yolk is then put up in a vessel, stirred in the equal amount of alkali ion water (pH 10.0), left alone for a specified period of time and then the supernatant is ultra-filtered and freeze-dried after removing a fat layer floated on the upper layer to produce soluble IgY powder.

L23 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

1997:49220 Document No. 126:130593 Oral administration of chicken yolk immunoglobulins to lower somatic cell count in the milk of lactating ruminants. Coleman, Marilyn A. (Ovimmune, Inc., USA). U.S. US 5585098 A 19961217, 6 pp., Cont. of U.S. Ser. No. 156,540, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1995-369310 19950106. PRIORITY: US 1993-156540 19931123.

AB A method for lowering somatic cell count in the milk of a lactating ruminant is disclosed. IgY antibodies are first obtained from the egg of a hen which has been actively immunized against one or more mastitis-causing pathogenic organisms by injection with an immunogen containing immunogenic determinants specific to elicit such antibodies. The immunogenic determinant may comprise only a specific portion of the pathogenic organism, e.g., the fimbria of a ciliated bacterium. The IgY antibodies are then administered orally to a ruminant in which it is desired to lower milk somatic cell count. Antibody administration may occur during a ruminant's dry period as well as during lactation. In a preferred embodiment, the antigen used in immunization of the hen comprises one or more of Staphylococcus aureus and Streptococcus agalactiae. The method of this invention has been shown to be efficacious in lowering somatic cell count in dairy cattle.

=> sl18 and lactobacillus
SL18 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d l18 and lactobacillus
'AND' IS NOT A VALID FORMAT
'LACTOBACILLUS' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files. Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):d his
'D' IS NOT A VALID FORMAT
'HIS' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid

in at least one of the files. Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
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L18 ANSWER 1 OF 2386 MEDLINE on STN
AB Incomplete Freund's adjuvant (IFA) is used as standard adjuvant for the production of specific antibodies. In this study, we evaluated the ability of supplementation of IFA with 1alpha,25-dihydroxyvitamin D(3) [1alpha,25(OH)(2)D(3)] or C-phosphate-guanosine-oligodeoxynucleotide (CpG-ODN) to enhance the quantity of specific IgY found in the eggs of hyperimmunized laying hens. In this comparative study, the fimbrial adhesin F4 of porcine enterotoxigenic Escherichia coli was used as prototype immunogen. Hens of 3 groups received by i.m. injection 20 mug of purified F4 adhesin emulsified with 1 of the following adjuvants: 0.5 mL of IFA alone (F4-IFA group), 0.5 mL of IFA supplemented with 285.6 ng of 1alpha,25(OH)(2)D(3) (F4-IFA-D(3) group), or 0.5 mL of IFA supplemented with 10 mug of CpG-ODN (F4-IFA-CpG group). Hens of 2 control groups received PBS or purified F4 alone. Immunization was repeated after 2 and 5 or 7 wk. Eggs were collected at 3- to 4-d intervals from preimmunization to d 79, and whole eggs were tested to measure the quantity of anti-F4 IgY by a standardized indirect ELISA. The quantity of specific anti-F4 IgY present in eggs from immunized hens of the F4-IFA group increased from d 13 to 79, corresponding to the end of the experiment. The values for this group at each time were considered as 100%. Results obtained for the other adjuvants were expressed in relation to this reference method. Supplementation of IFA with 1alpha,25(OH)(2)D(3) did not result in any enhancement of the quantity of anti-F4 IgY present in the eggs. On the other hand, supplementation of IFA with CpG-ODN resulted in an enhancement of yield up to 942% of the F4-specific antibody response. Moreover, the use of CpG-ODN is a cost-effective and ethical refinement for the production of specific antibodies, permitting a reduction in the number of immunizations needed. In conclusion, this study provides strong evidence for the use of IFA supplemented with CpG-ODN rather than IFA alone for the production of high levels of specific antibody in laying hens.

=> s l18 and lactobacillus
L24 15 L18 AND LACTOBACILLUS

=> dup remove l24
PROCESSING COMPLETED FOR L24
L25 11 DUP REMOVE L24 (4 DUPLICATES REMOVED)

=> d l25 1-11 cbib abs

L25 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
2007:234267 A study of the effects of IgY and Lactobacillus on the prevention and treatment of vaginal infection due to Candida albicans. Zhang, Wenping; Ma, Lianlan; Xie, Shuixiang; Fu, Yingyuan (Department of Pathogenic Biology, Gannan Medical College, Ganzhou, 341000, Peop. Rep. China). Shaanxi Yixue Zazhi, 35(2), 142-145 (Chinese) 2006. CODEN: SYZAEL. ISSN: 1000-7377. Publisher: Shaanxi Yixue Zazhi Bianjibu.
AB The objective is to observe the bio-activity of anti-Candida albicans IgY and Lactobacillus in vivo and intro and to study the possibility of combined application of them. The hum an vaginal epithelium cells were isolated and adherence inhibition experiment was perform ed after pretreating C.albicans and buccal Epithelium cells with anti-C.albicans IgY and Lactobacillus. After the mouse model of vaginitis infected with C.albicans, therapeutic effects of anti-C.albicans IgY and Lactobacillus administered vaginally were observed . Anti-C.albicans IgY and Lactobacillus can inhibit adherence of Candida albicans to vaginal

epithelium cells and reduce the vaginal C.albicans colonization as well as alleviate typical signs of mouse with C.albicans colonization. Anti-C.albicans IgY is of good biol. effect against Candida albicans in vivo and intro, and is better than that of Lactobacillus used independently, suggesting that the combined use of IgY and Lactobacillus can result in ideal effect.

L25 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
2005:58248 Document No. 142:154246 Pharmaceutical composition comprising egg yolk antibodies and probiotics for combination therapy of gastroenteric diseases caused by microorganisms. Alfa, Michelle (Avitek Pharma Inc., Can.). PCT Int. Appl. WO 2005005481 A2 20050120, 30 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-CA1005 20040712. PRIORITY: US 2003-485722P 20030710.
AB The manufacture of a pharmaceutical composition comprising egg yolk antibodies and at least one probiotic and the use thereof to treat diseases caused by enteric pathogens is described. In one embodiment the technol. is a multi-faceted therapeutic treatment to prevent diarrheal disease due to Clostridium difficile. The combination therapy comprises targeted delivery of avian IgY antibodies that neutralize the toxins produced by C. difficile (toxin A and toxin B) and nutriceuticals that restore normal bowel ecosystem balance and prevent the overgrowth of C. difficile.

L25 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
2005:1230992 Document No. 144:50039 Manufacture of IgY products for treating oral and upper respiratory infections. Ye, Shaojun; Zhou, Feng; Chen, Rulei; Yin, Juan (Peop. Rep. China). Faming Zhuanli Shenqing Gongkai Shuomingshu CN 1569229 A 20050126, 12 pp. (Chinese). CODEN: CNXXEV. APPLICATION: CN 2003-149558 20030717.
AB This invention relates to the manufacture of various chicken yolk Ig IgY products with specific anti-infective effects, the formulations of products containing IgY, and their specific applications. The IgY products can be used for treating dental caries, periodontal diseases, oral mucosa diseases, influenza, and laryngopharyngitis.

L25 ANSWER 4 OF 11 SCISEARCH COPYRIGHT (c) 2007 The Thomson Corporation on STN
2005:302112 The Genuine Article (R) Number: 905AO. Protective effect of microencapsulation consisting of multiple emulsification and heat gelation processes on immunloglobulin in yolk. Cho Y H; Lee J J; Park I B; Huh C S; Baek Y J; Park J (Reprint). Yonsei Univ, Dept Biotechnol, Seoul 120749, South Korea (Reprint); Korea Yakult Co Ltd, R&D Ctr, Yongin, South Korea. foodpro@yonsei.ac.kr. JOURNAL OF FOOD SCIENCE (MAR 2005) Vol. 70, No. 2, pp. E148-E151. ISSN: 0022-1147. Publisher: INST FOOD TECHNOLOGISTS, 525 WEST VAN BUREN, STE 1000, CHICAGO, IL 60607-3814 USA. Language: English. *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
AB Two different emulsification methods involving multiple emulsification and heat gelation were used for preparation of whey protein-based microcapsules containing immunoglobulin in yolk (IgY). The residual activity of IgY during the emulsion preparation and the effects of microencapsulation on IgY stability under harsh conditions were investigated. The residual activity of IgY in an emulsion prepared with a membrane emulsifier was higher than for an emulsion using a homogenizer. Microencapsulated IgY showed remarkable stability against both pepsin and acid. Both microencapsulated

IgY and nonencapsulated IgY were relatively stable in bile and artificial intestinal juice. Microencapsulated IgY retained 74% of initial activity during heat treatment. There were no significant differences in the residual activities of microencapsulated IgY under storage temperatures of 4, 25, and 37 degrees C.

L25 ANSWER 5 OF 11 MEDLINE on STN DUPLICATE 1

2004572825. PubMed ID: 15545368. Suppressive effect of functional drinking yogurt containing specific egg yolk immunoglobulin on Helicobacter pylori in humans. Horie K; Horie N; Abdou A M; Yang J-O; Yun S-S; Chun H-N; Park C-K; Kim M; Hatta H. (Research Department, Pharma Foods International Company, Ltd., Kyoto 601-8357, Japan.) Journal of dairy science, (2004 Dec) Vol. 87, No. 12, pp. 4073-9. Journal code: 2985126R. ISSN: 0022-0302. Pub. country: United States. Language: English.

AB Helicobacter pylori is a human pathogen that infects over 50% of the population worldwide. It is the most important etiologic agent of gastroduodenal ulcers and malignancies. Helicobacter pylori urease enzyme is considered the main factor for the organism's colonization in the gastroduodenal mucosa. Hens immunized with the purified urease produce a highly specific anti-H. pylori urease immunoglobulin (IgY -urease) in their egg yolks. Immunoglobulin Y-urease was stable at 60 to 65 degrees C for 30 min and at pH 4.0 for 7 h. Its activity was lost at 80 degrees C for 20 min and at pH 2 for 4 h. Specially designed functional drinking yogurt containing Lactobacillus acidophilus and Bifidobacterium spp. with 1% egg yolk IgY-urease was produced commercially. Immunoglobulin Y-urease activity showed stability in the product up to 7 d, and then decreased to 85% after 3 wk of storage. A clinical study was conducted to determine the effectiveness of IgY-urease yogurt to suppress infection in humans. Forty-two volunteers who tested positive for H. pylori using a 13C-urea breath test were recruited. A total of 450 mL of IgY-urease (test group) or IgY-urease-free yogurt (control group) was consumed in 150-mL portions 3 times daily for 4 wk. Volunteers were tested after 2 and 4 wk; urea breath test values significantly decreased in the test group compared with the control group. The results indicate that suppression of H. pylori infection in humans could be achieved by consumption of drinking yogurt fortified with IgY-urease.

L25 ANSWER 6 OF 11 MEDLINE on STN

2003160635. PubMed ID: 12621086. Identification of immunodominant Helicobacter pylori proteins with reactivity to H. pylori-specific egg-yolk immunoglobulin. Shin Ji-Hyun; Nam Seung-Woo; Kim Jung-Taik; Yoon Jong-Bok; Bang Won-Gi; Roe Im-Hwan. (Research Center for Gastroenterology and Department of Gastroenterology, Dankook University College of Medicine, Cheonan, Korea.) Journal of medical microbiology, (2003 Mar) Vol. 52, No. Pt 3, pp. 217-22. Journal code: 0224131. ISSN: 0022-2615. Pub. country: England: United Kingdom. Language: English.

AB The importance of hens eggs as a source of specific antibodies (IgY) is well recognized. The protective effect of IgY obtained from hens immunized with Helicobacter pylori whole-cell lysate has been reported for the control of H. pylori infection. However, IgY produced by whole-cell lysates presents the possibility of cross-reactivity with other bacteria, including the normal human flora, and this could decrease the efficiency of IgY. In the present study, the immunodominant proteins of H. pylori with reactivity to H. pylori-specific IgY (IgY-Hp) were identified.
IgY obtained from hens immunized with various fractions of H. pylori proteins was isolated and purified, titres of IgY-Hp against H. pylori were determined and cross-reactivity between IgY -Hp and normal human bacteria was examined by Western blot analysis. Finally, immunodominant H. pylori proteins were identified by LC/MS analysis. IgY obtained 2 months after immunization with H. pylori whole-cell lysate showed the highest antibody titre. Five immunodominant proteins were identified that were strongly reactive to IgY-Hp: urease beta-subunit (62 kDa), heat-shock protein 60 (60

kDa), urease alpha-subunit (26 kDa), probable peroxiredoxin (22 kDa) and probable thiol peroxidase (18 kDa). Immunization of hens with the immunodominant proteins identified would produce a more specific IgY against H. pylori.

L25 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
2003:68564 Document No.: PREV200300068564. Food containing active strains for inhibiting infection and treating gastritis, gastric and duodenal ulcers. Heo, Cheol Seong [Inventor, Reprint Author]; Lee, Jeong Jun [Inventor]; Baek, Young Jin [Inventor]; Kim, Hyung Soo [Inventor]. Chunan, South Korea. ASSIGNEE: Korea Yakult Co. Ltd., Seoul, South Korea. Patent Info.: US 6491956 20021210. Official Gazette of the United States Patent and Trademark Office Patents, (Dec 10 2002) Vol. 1265, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print). Language: English.
AB Live strains of Lactobacillus acidophilus HY2177 and Lactobacillus casei HY2743 maintained in nutritious foods, such as yogurt, imbue them with prophylactic and/or therapeutic properties. Such foods are beneficial in the prevention and/or treatment of gastritis, duodenal and gastric ulcers caused by infection from Helicobacter pylori (also referred to as H. pylori). The properties of these bacteria are boosted by the addition of egg yolk containing antibodies specific to H. pylori antigen derived from "fractionated H. pylori" and may be administered as active strains alone in a food supplement, or the active strains may be combined with H. pylori-antibodies (IgY).

L25 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
2002:171954 Document No. 136:215882 Stabilization of immunoglobulins at a low pH for inclusion in beverages. Norman, Daniel; Johansson, Marie-louise; Akesson, Bjoern; Nyberg, Lena; Paulsson, Marie (Probi Ab, Swed.). PCT Int. Appl. WO 2002018442 A1 20020307, 25 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-SE1836 20010829. PRIORITY: SE 2000-3045 20000829.
AB The authors disclose methods for stabilizing Igs in a solution having a pH below 4. The methods include the addition of cereals, hydrolyzed cereal products, or fruit juice concs. added in an amount sufficient to prevent Ig degradation The invention also refers to a health/sports drink comprising Igs in a solution having a pH of 2.7-3.8, which are stabilized by the addition of cereals or hydrolyzed cereal products, and which can optionally also contain a probiotic bacterium.

L25 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
2002:236546 Food containing active strains for inhibiting infection and treating gastritis, gastric and duodenal ulcers. Heo, Cheol Seong; Lee, Jeong Jun; Baek, Young Jin; Kim, Hyung Soo (Korea Yakult Co. Ltd., S. Korea). U.S. Pat. Appl. Publ. US 20020037341 A1 20020328 (English). CODEN: USXXCO. APPLICATION: US 2001-974461 20011010. PRIORITY: US 2000-2000/498668 20000207.
AB Live strains of Lactobacillus acidophilusHY2177 and Lactobacillus caseiHY2743 maintained in nutritious foods, such as yogurt, imbue them with prophylactic and/or therapeutic properties. Such foods are beneficial in the prevention and/or treatment of gastritis, duodenal and gastric ulcers caused by infection from Helicobacter pylori(also referred to as H. pylori). The properties of these bacteria are boosted by the addition of egg yolk containing antibodies specific to H. pyloriantigen derived from "fractionated H. pylori" and may be administered as active strains alone in a food supplement, or the active strains may be combined with H. pylori-antibodies (IgY).

L25 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
2001:459863 Document No. 135:66222 Compositions for treatment of periodontal disease, and device for applying the compositions. Oka, Hironori (Japan). Jpn. Kokai Tokkyo Koho JP 2001172186 A 20010626, 12 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1999-357002 19991216.

AB The invention relates to an agent for treatment of periodontal disease containing deep sea water, super oxidized water, magnetic wave-motion water, alkali ion water, and/or antibody-containing water, suitable for apply to teeth or gingiva with a specified device. A solution containing deep sea water 1.5, egg yolk antibody powder containing IgY against actinobacillus actinomycetecomitans 0.1 g was formulated and applied to patients with periodontal disease.

L25 ANSWER 11 OF 11 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN DUPLICATE 2
1991:322937 Document No.: PREV199192033452; BA92:33452. DETECTION OF CORYNEBACTERIUM-SEPEDONICUM WITH ANTIBODIES RAISED IN CHICKEN EGG YOLKS. UNDERBERG H A [Reprint author]; SANDER E. BIOL INST, UNIV TUEBINGEN, AUF MORGENSTELLE 28, D-7400 TUEBINGEN, GERMANY. Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz, (1991) Vol. 98, No. 2, pp. 188-196.
CODEN: ZPFPAA. ISSN: 0340-8159. Language: ENGLISH.

AB The suitability of purified antibodies raised in chicken egg yolk (IgY) for the detection of Corynebacterium sepedonicum (C. s.) was compared with antibodies from rabbit (IgG) in various formats of ELISA. The DAS-ELISA employing IgY antibodies as well for coating as for the alkaline phosphatase conjugate proved to be the most sensitive assay, the detection limit being 5 + 105 bacteria/ml sample buffer. When this assay was performed in potato tuber sap (1:5 diluted in sample buffer), there was no loss in sensitivity and no non-specific reactions were observed in the tuber sap. The purified IgY were assayed for cross-reactivity. There were no cross-reactions with C. flaccumfaciens, C. insidiosum, C. michiganense, C. nebrascense and Erwinia chrysanthemi and four out of six Lactobacillus-like strains. The latter were isolated because of their cross-reactivity in the fluorescent-antibody-staining assay. The high degree of specificity was effected by preadsorption of the antibody population to C. s. By this step, nonspecific antibodies are separated from C. s.-specific antibodies, which are released from the bacteria by pH shift later. When extensively compared with IgG from rabbit, the IgY type was equally suited as the IgG type antibodies. Moreover, the IgY can be obtained less cumbersome in larger quantities than IgG from serum.

=> s (nash p?/au or mitteness b?/au)
L26 1234 (NASH P?/AU OR MITTENESS B?/AU)

=> s l26 and microbial adherence inhibitor
L27 2 L26 AND MICROBIAL ADHERENCE INHIBITOR

=> dup remove l27
PROCESSING COMPLETED FOR L27
L28 2 DUP REMOVE L27 (0 DUPLICATES REMOVED)

=> d l28 1-2 cbib abs

L28 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
2004:182241 Document No. 140:198089 Immunogen adherence inhibitor directed to lactic acid producing organisms and method of making and using it. Nash, Peter; Mitteness, Bradley M. (USA). U.S. Pat. Appl. Publ. US 2004043020 A1 20040304, 16 pp., Cont.-in-part of U.S. Ser. No. 38,260. (English). CODEN: USXXCO. APPLICATION: US 2003-658491 20030908. PRIORITY: US 1999-143985P 19990715; US 2000-201268P 20000502; US 2000-616843 20000714; US 2002-38260 20020107.

AB A microbial adherence inhibitor specific to lactic acid producing microorganisms, in the form of fowl egg antibodies is disclosed, along with the method of making it and methods of using it. The inhibitor functions by substantially preventing the attachment or adherence of colony-forming immunogens in the rumen and intestinal tracts of host food animals. The inhibitor is made by inoculating female birds with the immunogen, allowing time for an immune response in the female bird and then harvesting the eggs that contain antibodies to the immunogen. The egg contents can be dried or used as a liquid and added to the feed or water for the host animals. Dependent upon the particular immunogen with which the female bird is inoculated, the egg antibody is used to promote the growth of food animals by improving feed conversion rates by decreasing the lactic acid production caused by the presence of certain colony-forming organisms in the animals, and to substantially reduce or eliminate the incidence of species that have been linked to very high production of lactic acid which can result in reduced performance and in acute situations, dangerously low rumen pH levels. When high levels of lactic acid are present in the rumen, rumen ulcers can form. When rumen ulcers are present other bacteria such as Fusobacterium necrophorum can escape the rumen and cause liver abscesses or laminitis, which further reduce feed conversion efficiency. Colony forming immunogens such as Streptococcus bovis (a major lactic acid producer) and Fusobacterium necrophorum can both be targeted by antibodies to enhance feed efficiency.

L28 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
2002:555957 Document No. 137:124202 Chicken egg antibodies for inhibiting adherence of colony-forming organism in rumen and intestinal tract of food animal. Nash, Peter; Rosevear, John W.; Robinson, Donald L. (USA). U.S. Pat. Appl. Publ. US 2002098181 A1 20020725, 12 pp., Division of U.S. Ser. No. 616,843. (English). CODEN: USXXCO. APPLICATION: US 2002-38260 20020107. PRIORITY: US 1999-143985P 19990715; US 2000-201268P 20000502; US 2000-616843 20000714.

AB A microbial adherence inhibitor in the form of fowl egg antibodies is disclosed, along with the method of making it and methods of using it. The inhibitor functions by substantially preventing the attachment or adherence of colony-forming immunogens in the rumen and intestinal tracts of host food animals. The inhibitor is made by inoculating female birds with the immunogen, harvesting the eggs which contain antibodies to the immunogen, harvesting the eggs which contain antibodies to the immunogen, drying the egg contents and adding to the feed or water for the host animals. Dependent upon the particular immunogen with which the female bird is inoculated, the egg antibody is used to promote the growth of food animals by improving feed conversion rates by decreasing the waste of dietary protein caused by the presence of certain colony-forming organisms in the animals, and to substantially reduce or eliminate the incidence of illnesses caused by the presence of certain illness-causing colony-forming immunogens, such as Escherichia coli O157:H7, in meat from food animals, and in other food stuffs.

=> s l26 and IgY
L29 1 L26 AND IGY

=> d l29 cbib abs

L29 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2004:681184 Document No. 141:172883 Passive immunity with avian antibodies to respiratory pathogens. Nash, Peter; Mitteness, Bradley M. (USA). U.S. Pat. Appl. Publ. US 2004161427 A1 20040819, 12 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-775557 20040210. PRIORITY: US 2003-447904P 20030219.

AB The authors disclose the preparation and application of fowl egg antibodies in preventing the attachment of adherence of colony-forming immunogens in the respiratory tracts of host animals and humans. The inhibitory antibodies are made by inoculating female birds (e.g., chickens) with the immunogen,

harvesting the eggs which contain antibodies to the immunogen, and separating the yolk and albumin from the shells of the eggs. The yolk and albumin contents are administered to animals or human by distributing the contents directly or introducing the contents entrained in air. In one example, antibodies derived from chickens were immunized with Pasteurella and Haemophilus immunogens were delivered as a top dressing to feed for swine. Compared to baseline controls, treated swine exhibited less mortality and a reduced requirement for antibiotic medication.

```
=> s avian antibod?
L30         182 AVIAN ANTIBOD?

=> s l30 and streptococcus
L31           1 L30 AND STREPTOCOCCUS

=> d l31 cbib abs

L31  ANSWER 1 OF 1  SCISEARCH  COPYRIGHT (c) 2007 The Thomson Corporation  on
     STN
2003:800509   The Genuine Article (R) Number: 719JL. Production of antibodies
     in chickens.  Narat M (Reprint). Univ Ljubljana, Biotechnol Fac, Dept Anim
     Sci, Groblje 3, SI-1230 Domzale, Slovenia (Reprint); Univ Ljubljana,
     Biotechnol Fac, Dept Anim Sci, SI-1230 Domzale, Slovenia. FOOD TECHNOLOGY
     AND BIOTECHNOLOGY (JUL-SEP 2003) Vol. 41, No. 3, pp. 259-267. ISSN:
     1330-9862. Publisher: FACULTY FOOD TECHNOLOGY BIOTECHNOLOGY, UNIV ZAGREB,
     KACIECEVA 23, 41000 ZAGREB, CROATIA. Language: English.
     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
AB        Chickens, as a source of desired antibodies, represent an alternate
     animal system that offers some advantages with respect to animal care,
     high productivity and special suitability of avian
     antibodies for certain diagnostic purposes.  Despite being an
     excellent counterpart to mammal IgG chicken IgY antibodies still represent
     an underused resource.  This may be due to the lack of information
     concerning the possibility of production and application of IgY or their
     use is being hampered by problems with keeping the chickens and with IgY
     isolation.  As a suggestion how to overcome IgY isolation problems a new
     immunoaffinity isolation method is presented here.  The main purpose of
     the present work is to provide information on developments and
     possibilities in the production of chicken IgY.  Polyclonal, monoclonal
     and recombinant forms of IgY, successfully produced so far, as well as
     their applications are summarised.  This article should be a contribution
     to the efforts of the European Centre for the Validation of Alternative
     Methods (ECVAM), whose main goal is to promote the scientific and
     regulatory acceptance of alternative methods, which are of importance to
     the bioscience and which reduce, refine or replace the use of laboratory
     animals.

=> s l30 and lacobacillus
L32           0 L30 AND LACOBACILLUS

=> d his

     (FILE 'HOME' ENTERED AT 13:01:19 ON 24 MAR 2007)

     FILE 'MEDLINE, EMBASE, BIOSIS, SCISEARCH, CAPLUS' ENTERED AT 13:01:34 ON
     24 MAR 2007
L1            1 S ACIDOSIS BACTERIA
L2         4259 S STREPTOCOCCUS BOVIS
L3            0 S L2 AND TRYPTASE SOY BROTH
L4           43 S L2 AND GROWTH MEDIUM
L5            0 S L4 AND ADHERINS
L6            0 S L4 AND ADHESION MOLECULE
L7            0 S L4 AND TRYPTASE SOY BROTH
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L8            18 DUP REMOVE L4 (25 DUPLICATES REMOVED)
L9          2589 S LACTOBACILLUS SPP
L10            0 S L9 AND ADHERINS
L11           70 S L9 AND ADHESION
L12            0 S L11 AND GROWTH MEDIUM
L13           14 S L11 AND ANTIBOD?
L14            4 DUP REMOVE L13 (10 DUPLICATES REMOVED)
L15           32 S L2 AND ADHESION
L16            4 S L15 AND ANTIBOD?
L17            4 DUP REMOVE L16 (0 DUPLICATES REMOVED)
L18         2386 S IGY
L19            0 S L18 AND STREPTOCOCCUS BOVIS
L20            0 S L18 AND LACTOBACILLUS SPP
L21          100 S L18 AND STREPTOCOCCUS
L22            3 S L21 AND BOVIS
L23            3 DUP REMOVE L22 (0 DUPLICATES REMOVED)
L24           15 S L18 AND LACTOBACILLUS
L25           11 DUP REMOVE L24 (4 DUPLICATES REMOVED)
L26         1234 S (NASH P?/AU OR MITTENESS B?/AU)
L27            2 S L26 AND MICROBIAL ADHERENCE INHIBITOR
L28            2 DUP REMOVE L27 (0 DUPLICATES REMOVED)
L29            1 S L26 AND IGY
L30          182 S AVIAN ANTIBOD?
L31            1 S L30 AND STREPTOCOCCUS
L32            0 S L30 AND LACOBACILLUS

=> s l18 and carrier
L33           54 L18 AND CARRIER

=> s l33 and feed carrier
L34            1 L33 AND FEED CARRIER

=> d l34 cbib abs

L34  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
2003:591031   Document No. 139:132461  Inhibition of gut bacterial adherence
      and colonization by egg-derived antibodies. (Camas, Incorporated, USA).
      PCT Int. Appl. WO 2003061693 A1 20030731, 54 pp.  DESIGNATED STATES: W:
      AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR,
      CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
      IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
      MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
      TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW; RW: AT, BE, BF, BJ, CF,
      CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML,
      MR, NE, NL, PT, SE, SN, TD, TG, TR.  (English).  CODEN: PIXXD2.
      APPLICATION: WO 2001-US49588 20011228.
AB    A microbial adherence inhibitor in the form of fowl egg antibodies is
      disclosed, along with the method of making it and methods of using it.
      The inhibitor functions by substantially preventing the attachment or
      adherence of colony-forming immunogens in the rumen and intestinal tracts
      of host food animals.  The inhibitor is made by inoculating female birds
      with the immunogen, harvesting the eggs which contain antibodies to the
      immunogen, drying the egg contents and adding to the feed or water for the
      host animals.  Dependent upon the particular immunogen with which the
      female bird is inoculated, the egg antibody is used to promote the growth
      of food animals by improving feed conversion rates by decreasing the waste
      of dietary protein caused by the presence of certain colony-forming
      organisms in the animals, and to substantially reduce or eliminate the
      incidence of illnesses caused by the presence of certain illness-causing
      colony-forming immunogens, such as E. coli O157:H7, in meat from food
      animals, and in other food stuffs.


=> s l33 adn soybean
MISSING OPERATOR L33 ADN
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The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l33 and soybean
L35 1 L33 AND SOYBEAN

=> d l35 cbib abs

L35 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2004:681184 Document No. 141:172883 Passive immunity with avian antibodies to respiratory pathogens. Nash, Peter; Mitteness, Bradley M. (USA). U.S. Pat. Appl. Publ. US 2004161427 A1 20040819, 12 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-775557 20040210. PRIORITY: US 2003-447904P 20030219.

AB The authors disclose the preparation and application of fowl egg antibodies in preventing the attachment of adherence of colony-forming immunogens in the respiratory tracts of host animals and humans. The inhibitory antibodies are made by inoculating female birds (e.g., chickens) with the immunogen, harvesting the eggs which contain antibodies to the immunogen, and separating the yolk and albumin from the shells of the eggs. The yolk and albumin contents are administered to animals or human by distributing the contents directly or introducing the contents entrained in air. In one example, antibodies derived from chickens were immunized with Pasteurella and Haemophilus immunogens were delivered as a top dressing to feed for swine. Compared to baseline controls, treated swine exhibited less mortality and a reduced requirement for antibiotic medication.

=> s l18 and feed carrier
L36 1 L18 AND FEED CARRIER

=> d l36 cbib abs

L36 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
2003:591031 Document No. 139:132461 Inhibition of gut bacterial adherence and colonization by egg-derived antibodies. (Camas, Incorporated, USA). PCT Int. Appl. WO 2003061693 A1 20030731, 54 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US49588 20011228.

AB A microbial adherence inhibitor in the form of fowl egg antibodies is disclosed, along with the method of making it and methods of using it. The inhibitor functions by substantially preventing the attachment or adherence of colony-forming immunogens in the rumen and intestinal tracts of host food animals. The inhibitor is made by inoculating female birds with the immunogen, harvesting the eggs which contain antibodies to the immunogen, drying the egg contents and adding to the feed or water for the host animals. Dependent upon the particular immunogen with which the female bird is inoculated, the egg antibody is used to promote the growth of food animals by improving feed conversion rates by decreasing the waste of dietary protein caused by the presence of certain colony-forming organisms in the animals, and to substantially reduce or eliminate the incidence of illnesses caused by the presence of certain illness-causing colony-forming immunogens, such as E. coli O157:H7, in meat from food animals, and in other food stuffs.

=> s l18 and corn
L37 9 L18 AND CORN

=> dup remove l37
PROCESSING COMPLETED FOR L37
L38 6 DUP REMOVE L37 (3 DUPLICATES REMOVED)

=> d l38 1-6 cbib abs

L38 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
2003:97257 Document No. 138:142481 Enteral compositions containing phospholipids, triglycerides and cholesterol for the prevention and/or treatment of sepsis. Hageman, Robert Johan Joseph; Speelmans, Gelske; Vriesema, Adrianus Johannes Maria (Nutricia N.V., Neth.). PCT Int. Appl. WO 2003009704 A2 20030206, 22 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-NL510 20020726. PRIORITY: EP 2001-202873 20010727.
AB The present invention relates to an enteral composition containing phospholipids, triglycerides and cholesterol or precursors thereof, which can be used in the treatment of sepsis. With the composition of the invention the natural level of chylomicrons is maintained, in particular in gut associated lymphoid tissue (GALT), which ensures that most of LPS and/or LTA which are released in the body can be neutralized, substantially decreasing the risk of locally occurring high levels of LPS and/or LTA and thus sepsis.

L38 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
2004:970576 Document No. 142:218061 Antibiotic-free feed composition. Kim, Jeong U. (Dan Biotech, S. Korea). Repub. Korean Kongkae Taeho Kongbo KR 2003012563 A 20030212, No pp. given (Korean). CODEN: KRXXA7. APPLICATION: KR 2001-46638 20010801.
AB A substitute feed composition for antibiotics is provided, thereby easily increasing immunity and health of domestic animals without using antibiotics. The substitute feed composition for antibiotics comprises 0.1 to 10% of eggs containing IgY obtained from laying hens immunized by an antigen selected from the group consisting of F4:K88, F5:K99, F6:987P, F18 and F41. It further comprises 35 to 45% of corn, 20 to 30% of dried whey, 10 to 20% of soybean waste, 5 to 15% of soybean protein, 0.5 to 8% of spray-dried blood, 0.5 to 8% of fish protein powder, 1 to 5% of animal lipid, 0.5 to 5% of calcium phosphate, 0.05 to 3% of limestone, 0.05 to 1% of premix of vitamin and mineral, 0.01 to 3% of salt, 0.01 to 3% of lysine, and 0.01 to 3% of methionine.

L38 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
2001:816695 Document No. 135:354990 Simulated activity of protein A displayed by ligands attached to a cellulose bead surface for affinity purification of proteins. Stipanovic, Bozidar; Griffin, Martin; Scarpa, Ioannis (Accurate Polymers, Inc., USA). PCT Int. Appl. WO 2001083515 A2 20011108, 23 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US13970 20010430. PRIORITY: US 2000-PV200591 20000428.
AB A method and compound for the purification of proteins includes the attachment to a support matrix of a non-peptidic, small compound which simulates the affinity of protein A for Igs. Once attached on the support matrix, the

resulting monochloro-triazine derivative is reacted with an excess of an amino compound at a higher temperature to achieve high levels of substitution. The resulting support matrix with ligand is useful in the affinity sepns. of antibodies. Further, a mercapto heterocyclic system ligand may be attached to the super matrix and is useful in affinity sepns. of antibodies. Orbicell beads having a primary or secondary amino group were reacted with triepoxide and then with thioimidazol to make beads for isolating IgY from egg yolk.

L38 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
2000:181011 Document No. 132:227451 Sustained-release preparations containing emulsified compositions. Horie, Noriko; Sakaguchi, Noboru (Taiyo Kagaku Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000080027 A 20000321, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-264031 19980902.
AB The prepns., which show sustained-release property in stomach based on gradual destruction of the emulsion by gastric acid, contain emulsified compns., e.g. containing yolk antibodies, mammal serum antibodies, etc. IgY was dissolved in a phosphate buffer and the solution was emulsified with corn oil using condensed ricinoleic acid polyglycerin ester fatty acid esters to give a W/O emulsion. Antibody activity of the emulsion in an artificial gastric juice at 37° was decreased from 0.48 to 0.46 after 2 h, vs. from 0.50 to 0.01 after 30 min of an aqueous IgY solution as a control.

L38 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
1998:256225 Document No. 128:320910 Dentifrices and food additives showing anticaries activities, etc., containing anti-Streptococcus mutans antibodies, etc.. Sunahori, Shinichi; Okabe, Keiichiro (Advance K. K., Japan). Jpn. Kokai Tokkyo Koho JP 10108648 A 19980428 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-279869 19961002.
AB Dentifrices and food additives showing anticaries, anti-periodontal disease, and hair-growing effects contain ≥2 selected from anti-Streptococcus mutans antibodies, plant leaf polyphenols, and 5'-deoxy-5'-methylthioadenosine (vitamin L2; I), vehicles which impart thickness and are held in oral cavity, and optional vitamins, intestinal bacteria exts., Ca powders, etc. A mixture of I, SunGY SMB (IgY to anti-S.), and Sunphenone (polyphenol) significantly inhibited dental plaque formation in dogs. A freeze-dried composition containing soluble starch, Na polyacrylate,Na alginate, I, intestinal bacteria extract, freeze-dried powder of intestinal bacteria culture, vitamin mixture, Ca gluconate, Ca, green tea polyphenol, yolk anti-S. mutans antibodies, and corn starch was formulated.

L38 ANSWER 6 OF 6 MEDLINE on STN DUPLICATE 1
86085831. PubMed ID: 2416749. Human plasma prekallikrein. Immunoaffinity purification and activation to alpha- and beta-kallikrein. Burger D; Schleuning W D; Schapira M. The Journal of biological chemistry, (1986 Jan 5) Vol. 261, No. 1, pp. 324-7. Journal code: 2985121R. ISSN: 0021-9258. Pub. country: United States. Language: English.
AB Prekallikrein was purified from human plasma with a final yield of 76% using as the principal step adsorption to immobilized chicken antikallikrein IgY. When purified prekallikrein (3.4 microM) was incubated in the presence of beta-Factor XIIa (0.068 microM) for 5 min at 37 degrees C and pH 7.5, alpha-kallikrein was obtained. Upon prolonged incubation (0.5-28 h), the Mr 52,000 heavy chain of alpha-kallikrein was progressively cleaved, resulting in the formation of beta-kallikrein. The formation of beta-kallikrein was characterized as an autolytic process because it was prevented by specific inhibitors of kallikrein, including aprotinin and antikallikrein antibody but not by corn trypsin inhibitor, an inhibitor specific for beta-Factor XIIa.

=> s l18 and soybean hulls

```
L39             0 L18 AND SOYBEAN HULLS

=> s l18 and rice hulls
L40             0 L18 AND RICE HULLS

=> s l18 and cottonseed hulls
L41             1 L18 AND COTTONSEED HULLS

=> d l41 cbib abs

L41  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
2003:591031   Document No. 139:132461  Inhibition of gut bacterial adherence
     and colonization by egg-derived antibodies. (Camas, Incorporated, USA).
     PCT Int. Appl. WO 2003061693 A1 20030731, 54 pp.  DESIGNATED STATES: W:
     AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR,
     CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
     IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
     MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
     TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW; RW: AT, BE, BF, BJ, CF,
     CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML,
     MR, NE, NL, PT, SE, SN, TD, TG, TR.  (English).  CODEN: PIXXD2.
     APPLICATION: WO 2001-US49588 20011228.
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     of host food animals.  The inhibitor is made by inoculating female birds
     with the immunogen, harvesting the eggs which contain antibodies to the
     immunogen, drying the egg contents and adding to the feed or water for the
     host animals.  Dependent upon the particular immunogen with which the
     female bird is inoculated, the egg antibody is used to promote the growth
     of food animals by improving feed conversion rates by decreasing the waste
     of dietary protein caused by the presence of certain colony-forming
     organisms in the animals, and to substantially reduce or eliminate the
     incidence of illnesses caused by the presence of certain illness-causing
     colony-forming immunogens, such as E. coli O157:H7, in meat from food
     animals, and in other food stuffs.


=> s l18 and distilled dried grains
L42             0 L18 AND DISTILLED DRIED GRAINS

=> s l18 and beet pulp
L43             0 L18 AND BEET PULP

=>

---Logging off of STN---


=>
Executing the logoff script...


=> LOG Y

COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY     SESSION
FULL ESTIMATED COST                             281.88      282.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                 ENTRY     SESSION
CA SUBSCRIBER PRICE                             -24.18      -24.18
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